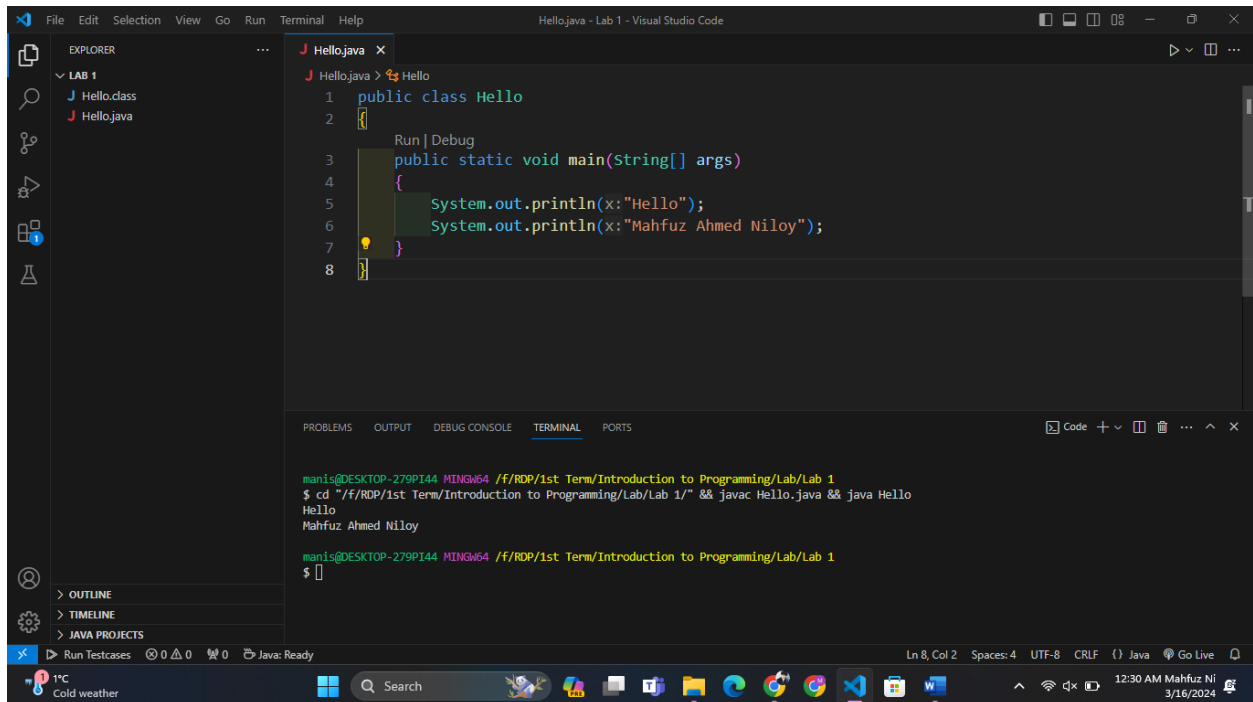


LAB - 1

1.

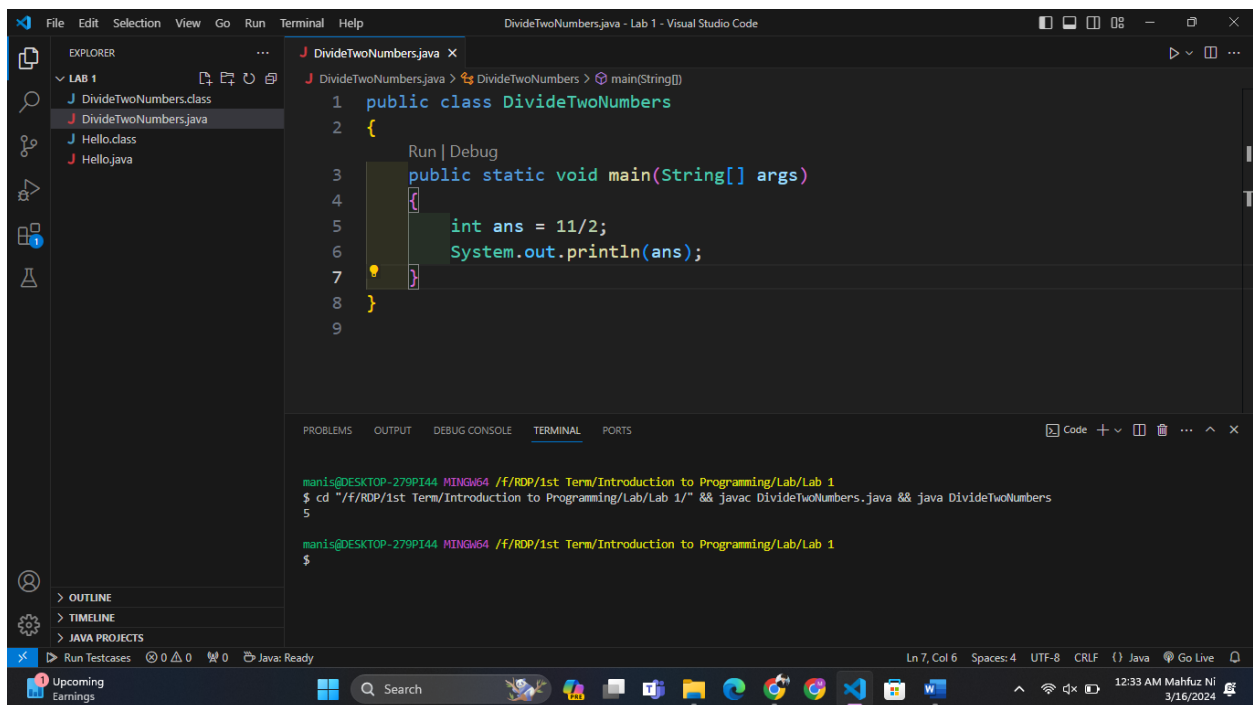


The screenshot shows the Visual Studio Code interface with a file named `Hello.java` open. The code defines a `Hello` class with a `main` method that prints "Hello" and "Mahfuz Ahmed Niloy". The terminal at the bottom shows the command to compile and run the program, resulting in the expected output.

```
1 public class Hello
2 {
3     public static void main(String[] args)
4     {
5         System.out.println(x:"Hello");
6         System.out.println(x:"Mahfuz Ahmed Niloy");
7     }
8 }
```

```
manis@DESKTOP-279PI44 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$ cd "/f/RDP/1st Term/Introduction to Programming/Lab/Lab 1/" && javac Hello.java && java Hello
Hello
Mahfuz Ahmed Niloy
manis@DESKTOP-279PI44 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$
```

2. When I use the integer variable the result shows only the integer part. The actual result of the calculation is 5.5. But here I am showing only 5 as I use an integer variable.



The screenshot shows the Visual Studio Code interface with a file named `DivideTwoNumbers.java` open. The code defines a `DivideTwoNumbers` class with a `main` method that calculates `11/2` and stores the result in an integer variable `ans`, which is then printed. The terminal at the bottom shows the command to compile and run the program, resulting in the output `5`.

```
1 public class DivideTwoNumbers
2 {
3     public static void main(String[] args)
4     {
5         int ans = 11/2;
6         System.out.println(ans);
7     }
8 }
9 }
```

```
manis@DESKTOP-279PI44 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$ cd "/f/RDP/1st Term/Introduction to Programming/Lab/Lab 1/" && javac DivideTwoNumbers.java && java DivideTwoNumbers
5
manis@DESKTOP-279PI44 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$
```

3.

The screenshot shows the Visual Studio Code interface with the 'Operations.java' file open. The Explorer sidebar on the left shows a project named 'LAB 1' containing files: 'DivideTwoNumbers.class', 'DivideTwoNumbers.java', 'Hello.class', 'Hello.java', 'Operations.class', and 'Operations.java'. The main editor displays the code for 'Operations.java' with line numbers 1 through 15. The code defines a public class 'Operations' with a main method that calculates and prints four integers: 'a' (-5 + 8 * 6), 'b' ((55+9) % 9), 'c' (20 + -3*5 / 8), and 'd' (5 + 15 / 3 * 2 - 8 % 3). The bottom panel shows the 'TERMINAL' tab with the command to compile and run the program, and the output showing the calculated values of 'a', 'b', 'c', and 'd'.

```
1 public class Operations
2 {
3     public static void main(String[] args)
4     {
5         int a = -5 + 8 * 6;
6         int b = (55+9) % 9;
7         int c = 20 + -3*5 / 8;
8         int d = 5 + 15 / 3 * 2 - 8 % 3;
9         System.out.println(a);
10        System.out.println(b);
11        System.out.println(c);
12        System.out.println(d);
13    }
14 }
15
```

```
$ cd "/f/RDP/1st Term/Introduction to Programming/Lab/Lab 1/" && javac Operations.java && java Operations
43
1
19
13
manis@DESKTOP-279P144 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$
```

4.

The screenshot shows the Visual Studio Code interface with the 'Pattern.java' file open. The Explorer sidebar on the left shows the same project structure as in the previous screenshot, but with an additional file 'Pattern.class' and a message 'Extensions (Ctrl+Shift+X) - 1 requires reload'. The main editor displays the code for 'Pattern.java' with line numbers 1 through 11. The code defines a public class 'Pattern' with a main method that prints four lines of a pattern using 'J' and 'a' characters. The bottom panel shows the 'TERMINAL' tab with the command to compile and run the program, and the output showing the pattern of 'J' and 'a' characters.

```
1 public class Pattern
2 {
3     public static void main(String[] args)
4     {
5         System.out.println("J   a   v   v   a");
6         System.out.println("J   a   a   v   v   a   a");
7         System.out.println("J   aaaaa   V   V   aaaaa");
8         System.out.println("JJ  a   a   V   a   a");
9     }
10 }
11
```

```
$ cd "/f/RDP/1st Term/Introduction to Programming/Lab/Lab 1/" && javac Pattern.java && java Pattern
J   a   v   v   a
J   a   a   v   v   a   a
J   aaaaa   V   V   aaaaa
JJ  a   a   V   a   a
manis@DESKTOP-279P144 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$
```

[illegible]

7.

The screenshot shows the Visual Studio Code interface with a Java project named 'FavouriteMovieQuote.java'. The Explorer sidebar on the left lists several Java files under 'LAB 1', including 'FavouriteMovieQuote.java' which is currently selected. The main editor displays the code for 'FavouriteMovieQuote.java', which defines a public class with a main method. The main method contains several println statements that output specific text. Below the code editor, the TERMINAL panel shows the command used to compile and run the program, and the resulting output of the program's execution.

```
File Edit Selection View Go Run Terminal Help
FavouriteMovieQuote.java - Lab 1 - Visual Studio Code

EXPLORER
LAB 1
  CarlysCatering.class
  CarlysCatering.java
  DivideTwoNumbers.class
  DivideTwoNumbers.java
  FavouriteMovieQuote.class
  FavouriteMovieQuote.java
  Hello.class
  Hello.java
  Operations.class
  Operations.java
  Pattern.class
  Pattern.java
  SammysSeashore.class
  SammysSeashore.java

FavouriteMovieQuote.java
1 public class FavouriteMovieQuote
2 {
3     Run | Debug
4     public static void main(String[] args)
5     {
6         System.out.println();
7         System.out.println(x:"Hatred is born in order to protect love,");
8         System.out.println();
9         System.out.println(x:"said by Madara Uchiha");
10        System.out.println(x:"in the anime Naruto:Shippuden");
11        System.out.println();
12        System.out.println(x:"in 2007.");
13        System.out.println();
14    }
15 }

TERMINAL
$ cd "/f/RDP/1st Term/Introduction to Programming/Lab/Lab 1/" && javac FavouriteMovieQuote.java && java FavouriteMovieQuote

Hatred is born in order to protect love,

said by Madara Uchiha

in the anime Naruto:Shippuden

in 2007.

manis@DESKTOP-279P144 MINGW64 /f/RDP/1st Term/Introduction to Programming/Lab/Lab 1
$
```